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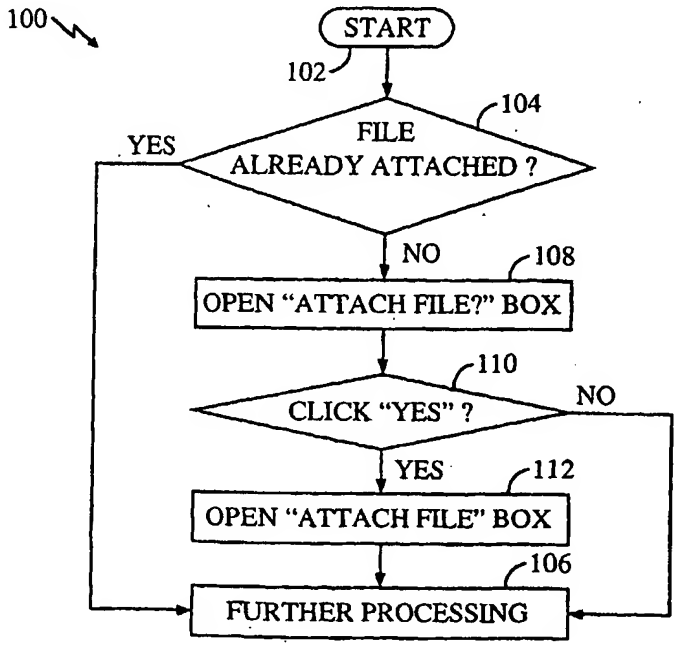
(54) Title: REMINDING E-MAIL WRITER TO ATTACH FILE



(57) Abstract: An e-mail system determines whether a file is already attached to a message (104). If it is not, the system scans the message for the word "attach" (or some variant thereon) (202). If the word is present, the system opens a conventional "Attach File?" dialog box (108). If not, it proceeds directly to further processing (106).

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REMINDING E-MAIL WRITER TO ATTACH FILE

I. Technical Field

This invention relates to electronic mail ("e-mail"), and has particular relation to attachments to e-mail messages.

II. Background Art

Electronic mail ("e-mail") emulates, as its name implies, the function of conventional, paper-based mail ("snail mail"). As the derogatory epithet "snail mail" implies, paper-based mail is much slower than e-mail.

An important feature of snail mail is the ability to send attachments. A single letter may describe, in very general terms, a number of important documents which are attached to the letter and enclosed in the same envelope.

It often happens that the person who prepares and signs a snail mail letter, with multiple attachments, is an executive and not a secretary. It is the secretary, and not the executive, who photocopies the letter after signature, addresses the envelope, places the letter and attachments in the envelope, places the envelope in the mail box, places the photocopies in the file, and places the file in the filing cabinet. It sometimes happens that the secretary is inadequately trained (or alert), and mails only the letter -- without mailing the attachments. It is disconcerting to receive such a letter and to be forced to complain to the executive who signed it. If the executive receives enough complaints, he is forced to reassign his secretary to duties which require less training and alertness. A trained, alert secretary has long been regarded as the only effective defense to this business malfunction.

With the rise of e-mail, the executive must assume these duties himself. He must be trained on how to make an electronic attachment, and he must be alert to actually attach the attachment whenever there is one to be attached. The consequences of not making an electronic attachment can be just as devastating as not making a paper attachment, or even worse. With an executive sending e-mail -- as with a secretary sending snail mail -- training and alertness have long been regarded as the only effective defense to this business malfunction.

BRIEF DISCLOSURE OF THE INVENTION

Applicant has noticed that this does not have to be so. While a secretary must always remind herself to check whether an attachment needs to be enclosed, the executive can configure his e-mail system to generate the reminder for him. Indeed, he can even have his system display some initiative by having it first scan the e-mail message for the word "attach" (or some variant thereof), and issue a reminder only when the word is present.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is flow chart of a general method of reminding the writer of an e-mail message to attach a file.

FIG. 2 is a flow chart showing how the reminder can be conditioned on the presence of the word "attach" in the message.

FIG. 3 is a flow chart showing how this presence can be scanned for after every keystroke.

FIG. 4 is a flow chart showing how this presence can be scanned for after a "Send" or "Queue" command.

FIG. 5 is a flow chart showing how the methods of FIGS. 1-4 may be toggled on or off.

FIG. 6 is a block diagram of a preferred apparatus for implementing the processes of FIGS. 1-5.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

FIG. 1 is 1 is flow chart (100) of a general method of reminding the writer of an e-mail message to attach a file. We start (102) and determine (104) if a file is already attached. If it is, then the present invention need not be invoked, and the system may proceed directly to further processing (106). If a file has not already been attached, however, then the system opens a reminder dialog box (108), asking the user, "Do you want to attach file?", or words of similar import. The user then clicks (110) "Yes" or "No". If "Yes", then the system opens (112)

a conventional "Attach File" box. This box determines the file to be attached and attaches it, as is known in the art.

FIG. 2 is a flow chart (200) showing how the reminder can be conditioned on the presence of the word "attach" in the message. In FIG. 1, the "No" branch from the File-already-attached? step (104) proceeded directly to the Open-"Attach-File?"-box step (108). Here, however, the "No" branch leads to a scanning (202) of the e-mail message for the word "attach" (or some variant thereof). If the word is present (204), then the system proceeds to the Open-"Attach-File?"-box step (108), and then to further processing (106). If the word is not present, then the system proceeds directly to further processing (106).

FIG. 3 is a flow chart (300) showing how this presence can be scanned for after every keystroke. Now the "No" branch leads to the inputting of a keystroke (302). "Keystroke", in this context, includes a command, such as may be initiated by clicking on a soft key on the monitor. If this keystroke is a command to send the message (304) or to queue the message for later sending, the system proceeds directly to further processing (106). If this keystroke is not a command to send or queue the message, then the system scans (202) the message for the word "attach" as before. If it is not present, then the next keystroke is input (302). If it present, then the system takes the Open-"Attach-File?"-box step (108) of FIG. 1, and flow continues as in FIG. 1.

FIG. 4 is a flow chart (400) showing how this presence can be scanned for after a "Send" or "Queue" command. Program flow is as described in FIG. 3 until the Send-or-queue? step (304), but now the branches are reversed. Now the "No" branch cycles back to the input-keystroke step (302), while the "Yes" branch proceeds to the scan-for-"attach" step (202). Program flow continues as in FIG. 2, except that the "No" branch from the Is-"attach"-present? step (204) goes directly to further processing (106) rather than being cycled back to the next keystroke (302).

FIG. 5 is a flow chart (500) showing how the methods of FIGS. 1-4 may be toggled on or off. Now the first step after the start (102) is the opening of a reminder dialog box (502), "Remind me to attach file every time?". The user clicks "Yes" or "No" (504). If "No", or "Remind me if I use 'attach' in my message", or words of similar import, then a reminder is given only if the word "attach" (or some variant thereof) appears in the message. Thus, it is only

when a file is already attached to the message (104) that the system proceeds directly to further processing. If no file is already attached, the system continues (506) as in FIGS 1-4, as appropriate. If the user clicks "Yes" (504), then the system proceeds as in FIG. 4, except that scan-for-"attach" step (202) and present? step (204) are omitted. Once the Send or Queue commands have been given (304), program flow continues directly to the Open-"attach-file?"-box step (108).

FIG. 6 is a block diagram (600) of a preferred apparatus for implementing the processes of FIGS. 1-5. A computer 602 includes a disk drive (604), into which a disk (606) may be inserted. The disk embodies computer code structured to cause the computer to perform any of the above methods. Firmware, hardware, tape, or any other convenient medium may also be used to embody the computer code.

The preferred wording of the various dialog boxes is as stated above, but may be modified to suit the convenience of the user. Such modifications are included within my invention.

Industrial Application

My invention is capable of exploitation in industry, and can be made and used, whenever is it desired to remind an e-mail writer to attach a file. The individual components of the apparatus and method shown herein, taken separate and apart from one another, may be entirely conventional, it being their combination which I claim as my invention.

While I have described various modes of apparatus and method, the true spirit and scope of my invention are not limited thereto, but are limited only by the following claims and their equivalents, and I claim such as my invention.

What is claimed is:

CLAIMS

1. A method for interfacing with a writer of an e-mail message, *characterized in that* the method includes:
   (a) if no file has been attached to the message, then opening a reminder dialog box inquiring whether the user wants to attach a file;
   (b) if the writer clicks "Yes", then opening an Attach File dialog box.

2. The method of Claim 1, *further characterized in that* the method further includes:
   (a) before opening the reminder dialog box, scanning the message for the word "attach" or some variant thereof; and
   (b) opening the reminder dialog box inquiring whether the user wants to attach a file only if the word appears in the message.

3. The method of Claim 2, *further characterized in that* the scanning takes place after each keystroke.

4. The method of Claim 2, *further characterized in that* the scanning takes place when the writer clicks "Send" or "Queue".

5. The method of Claim 2, *further characterized in that* the method further includes:
   (a) before the message writing takes place, opening a reminder dialog box inquiring whether the user wants to be reminded to attach a file every time; and
   (b) scanning the message for the word "attach" or some variant thereof only if the writer clicks on a request to be reminded to attach a file whenever the word "attach" or some variant thereof appears in the message.

6. A medium embodying code for a computer, ***characterized in that*** the code is structured to cause the computer to perform any of the above methods.

7. The medium of Claim 6, ***further characterized in that*** the medium is a disk.

8. An interface for a writer of an e-mail message, ***characterized in that*** the interface includes:

(a) means for opening reminder dialog box inquiring whether the user wants to attach a file if no file has been attached to the message;

(b) means for opening an Attach File dialog box if the writer clicks "Yes".

9. The interface of Claim 8, ***further characterized in that*** the interface further includes:

(a) means for scanning the message for the word "attach" or some variant thereof before opening the reminder dialog box; and

means for opening the reminder dialog box inquiring whether the user wants to attach a file only if the word appears in the message.

10. The interface of Claim 9, ***further characterized in that*** the scanning means is structured to scan after each keystroke.

11. The interface of Claim 9, ***further characterized in that*** the scanning means is structured to scan when the writer clicks "Send" or "Queue".

12. The interface of Claim 9, ***further characterized in that*** the interface further includes:

(a) means for opening a reminder dialog box inquiring whether the user wants to be reminded to attach a file every time before the message writing takes place; and

(b) means for scanning the message for the word "attach" or some variant thereof only if the writer clicks on a request to be reminded to attach a file whenever the word "attach" or some variant thereof appears in the message.

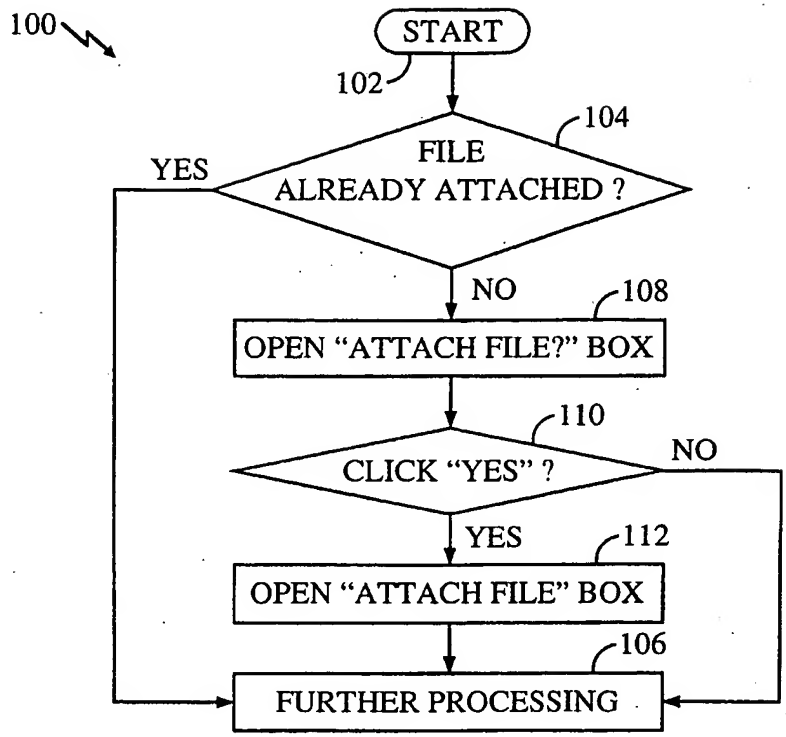
100
START
102
104
FILE
ALREADY ATTACHED ?
YES
NO
108
OPEN "ATTACH FILE?" BOX
110
CLICK "YES" ?
NO
YES
112
OPEN "ATTACH FILE" BOX
106
FURTHER PROCESSING

FIG. 1

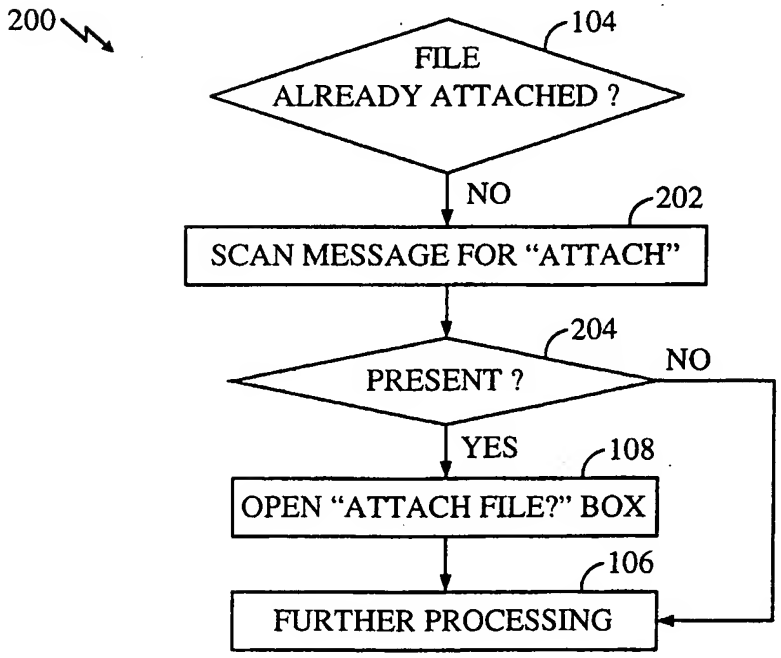
200
104
FILE
ALREADY ATTACHED ?
NO
202
SCAN MESSAGE FOR "ATTACH"
204
PRESENT ?
NO
YES
108
OPEN "ATTACH FILE?" BOX
106
FURTHER PROCESSING

FIG. 2

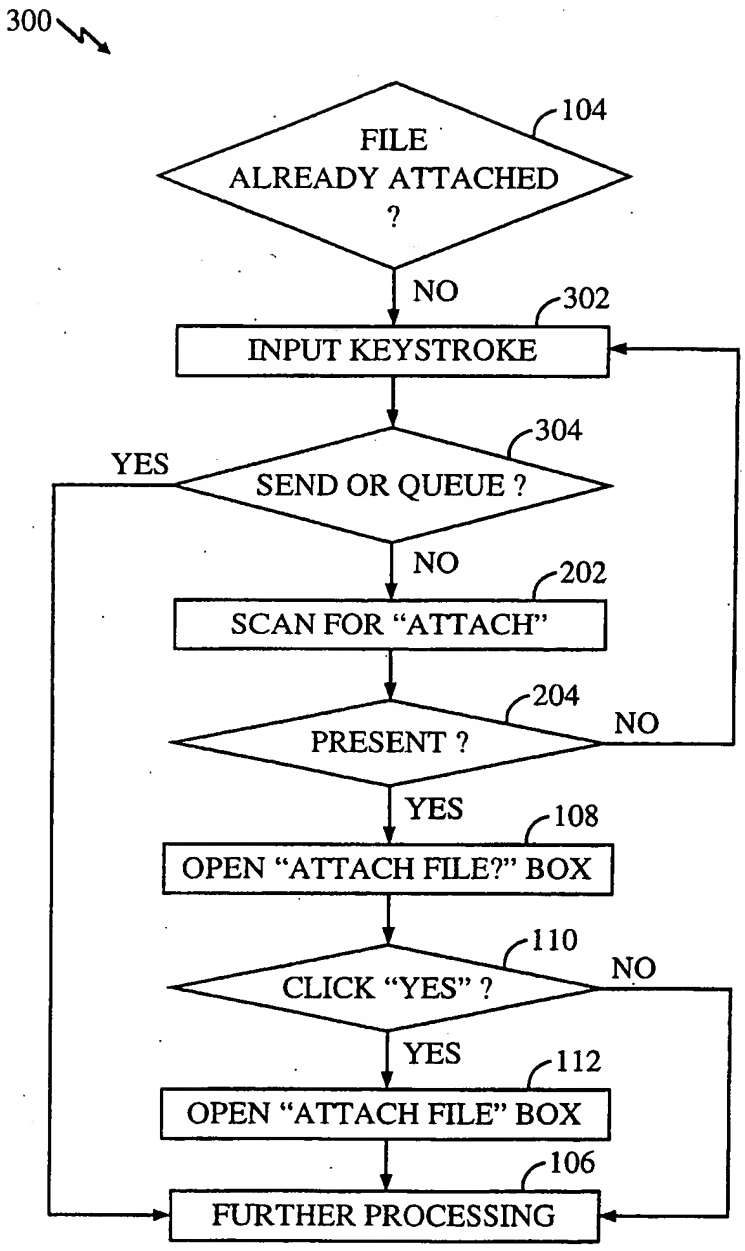
300
104
FILE ALREADY ATTACHED ?
NO
302
INPUT KEYSTROKE
304
YES
SEND OR QUEUE ?
NO
202
SCAN FOR "ATTACH"
204
PRESENT ?
NO
YES
108
OPEN "ATTACH FILE?" BOX
110
CLICK "YES" ?
NO
YES
112
OPEN "ATTACH FILE" BOX
106
FURTHER PROCESSING

FIG. 3

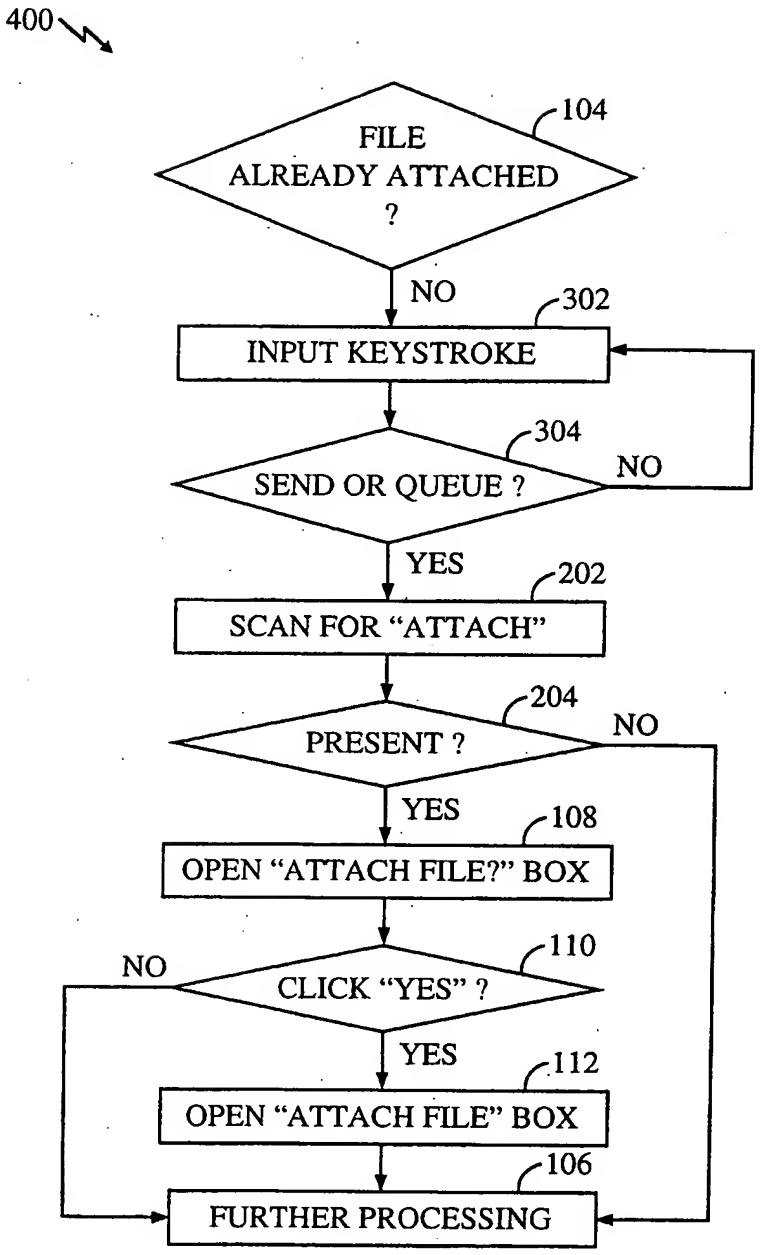
400
104
FILE ALREADY ATTACHED ?
NO
302
INPUT KEYSTROKE
304
SEND OR QUEUE ?
NO
YES
202
SCAN FOR "ATTACH"
204
PRESENT ?
NO
YES
108
OPEN "ATTACH FILE?" BOX
110
NO
CLICK "YES" ?
YES
112
OPEN "ATTACH FILE" BOX
106
FURTHER PROCESSING

FIG. 4

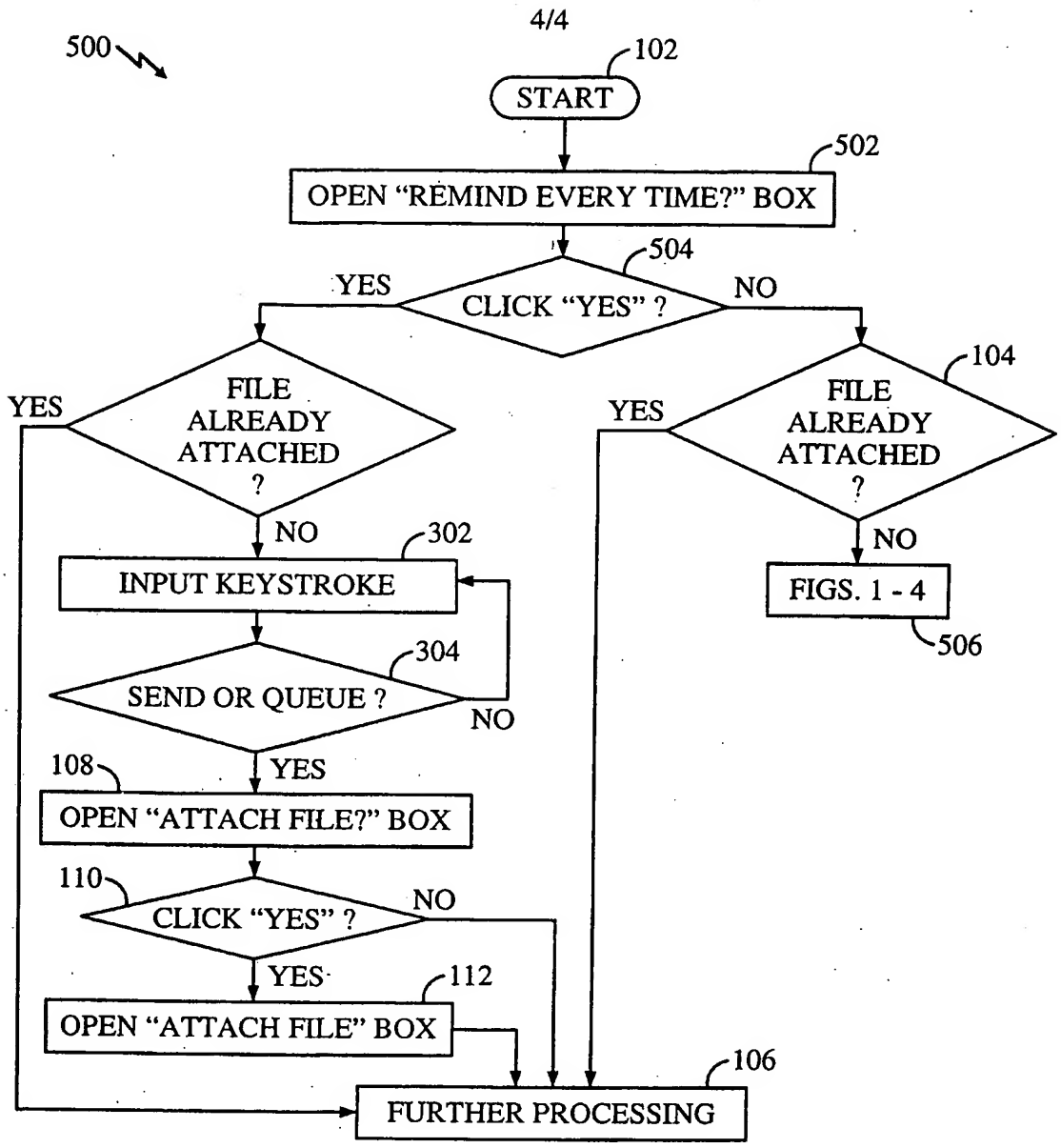
500
102
START
502
OPEN "REMIND EVERY TIME?" BOX
504
CLICK "YES" ?
YES
NO
FILE ALREADY ATTACHED ?
YES
NO
302
INPUT KEYSTROKE
304
SEND OR QUEUE ?
NO
YES
108
OPEN "ATTACH FILE?" BOX
110
CLICK "YES" ?
NO
YES
112
OPEN "ATTACH FILE" BOX
104
FILE ALREADY ATTACHED ?
YES
NO
FIGS. 1 - 4
506
106
FURTHER PROCESSING

FIG. 5

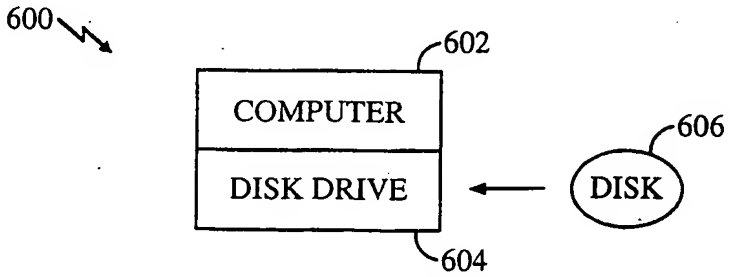
600
602
COMPUTER
DISK DRIVE
604
606
DISK

FIG. 6